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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,070	09/04/2001	Yuichi Bannai	35.C15745	1150

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EXAMINER
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HOOSAIN, ALLAN

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/944,070

Applicant(s)

BANNAI ET AL.

Examiner

Allan Hoosain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## FINAL DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claims 3,7,12,14-15,17,19,24,29,35-36, the phrase "ocular-type" renders the claim indefinite because it is unclear whether the limitation(s) following the word 'type' in the phrase are part of the claimed invention. See MPEP § 2173.05(d).

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,6-8,10-13,15-16,21-23,25-37 are rejected under 35 U.S.C. 102(e) as being anticipated by **Mitchell et al.** (US 6,697,894).

As to Claim 1, with respect to Figure 1, **Mitchell** teaches a personal information terminal comprising:

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data display means, 108, 112, including an enlarging optical system (Col. 9, lines 7-13);

input means for receiving instructions from a user (Col. 9, lines 33-37,53-57);

wireless communications means for wirelessly connecting to a network (Col. 9, lines 58-60); and

control means for obtaining information from the network through the wireless communication means and for displaying the information on the data display means, based on instructions from the input means (Col. 9, lines 26-43),

wherein the control means limits an amount of electrical power supplied to the data display means to an amount less than an amount at a normal time while the control means is obtaining the information from the network through the wireless communication means (Col. 15, lines 48-52, Col. 16, lines 54-59).

As to Claim 4, **Mitchell** teaches a personal information terminal according to claim 3, wherein the control means cuts off the video display as needed (electrical power supplied) to the illumination device while the control means is obtaining the information from the network through the wireless communication means (Col. 15, lines 48-52).

As to Claim 5, **Mitchell** teaches a personal information terminal according to Claim 3, wherein the control means turns the liquid crystal display device onto video as needed (a low energy consumption mode) while the control means is obtaining the information from the network through the wireless communication means (Col. 15, lines 48-52).

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As to Claim 6, **Mitchell** teaches a personal information terminal according to Claim 1, wherein the input means is a keyboard input (a push button switch) (Col. 6, lines 46-48).

As to Claims 7-8, with respect to Figure 1, **Mitchell** teaches a personal information terminal comprising:

an ocular-type data display means arranged within a display of a window and having an enlarging optical system (Col. 9, lines 7-13);

input means for receiving instructions from a user (Col. 9, lines 33-37,54-57);

wireless communications means for wirelessly connecting to a network (Col. 9, lines 58-65);

control means for obtaining information from the network through the wireless communication means and for making the information be displayed on the ocular-type data display means, based on instructions from the input means (Col. 9, lines 27-43); and

a pop-up window (notification means) for providing a notification to a user at least as to whether the control means is in a Find state of obtaining information from the network through the wireless communication means wherein the notification means being arranged outside the HTML page (the display window) (Col. 14, lines 8-18 and Col. 15, lines 48-58).

As to Claims 10-11, **Mitchell** teaches a personal information terminal according to Claim 7, wherein the notification means makes the notification auditorily (Col. 9, lines 37-43).

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As to Claim 12, **Mitchell** teaches a personal information terminal according to Claim 7, wherein the notification means provides notification to the user as to whether the control means is in a state of obtaining information from the network through the wireless communication means, or whether it is in a state of displaying the obtained information on the ocular-type data display means (Col. 15, lines 25-31).

As to Claim 13, **Mitchell** teaches a personal information terminal according to Claim 12, wherein the notification means further provides notifications to the user as to whether the wireless communication means is in a state of having ended the network connection normally, or whether the wireless communication means is in a state of having ended the network connection abnormally (Col. 15, lines 52-58).

As to Claims 15-16, **Mitchell** teaches a personal information terminal according to Claim 1, wherein the input means is comprised of a moving means for moving a cursor position on a display window of the ocular-type data display means; and a starting means for starting a process corresponding to information on the display window where the cursor is located (Col. 6, lines 41-48).

As to Claims 21-23, **Mitchell** teaches a personal information terminal according to Claim 1, wherein the data display means is arranged within a display window provided to a housing of the personal information terminal, and the input means is provided on the personal information

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terminal housing, and a surface of the display window and a surface of the housing where the input means is arranged are parallel (Col. 11, lines 57-60).

As to Claim 25, **Mitchell** teaches a personal information terminal according to Claim 7, wherein the display window is provided to a housing of the personal information terminal, and the notification means is arranged either on a surface of the housing where the display window is provided, or on a surface of the housing that is perpendicular to the housing surface where the display window is provided (Col. 11, lines 57-60).

As to Claims 26-28, with respect to Figures 1-3, **Mitchell** teaches activation of video as needed (an energy-consumption reduction method) to be applied in a personal information terminal having data display means including an enlarging optical system, input means for receiving instructions from a user and wireless communications means for wirelessly connecting to a network, the method comprising:

- an information obtaining step of obtaining information from the network through the wireless communication means based on instructions from the input means (Col. 15, lines 21-31);

- a display step of displaying the information obtained in the information obtaining step on the data display means (Col. 15, lines 39-47); and

- a limiting step of limiting video display (an amount of electrical power supplied) to the data display means to video-less display (an amount less than an amount at a normal time) while

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task information is being obtained from the network through the wireless communication means at the information obtaining step (Col. 15, lines 48-52).

As to Claims 29-37, with respect to Figures 1-7, **Mitchell** teaches a status notification method to be applied in a personal information terminal having an ocular-type data display means arranged within a display window and having an enlarging optical system, input means for receiving instructions from a user, a wireless communications means for wirelessly connecting to a network and notification means arranged outside the display window, comprising of:

an information obtaining step of obtaining information from the network through the wireless communication means based on instructions from the input means (Col. 15, lines 21-31);

a display step of displaying the information obtained in the obtaining step on the data display means (Col. 15, lines 39-47); and

a notification step of providing a notification to a user at least as to whether information is being obtained from the network through the wireless communication means by means of the notification means (Col. 14, lines 1-18 and Col. 15, lines 39-47).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



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6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 3,9,14,24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mitchell** in view of **Zavracky et al.** (US 6,097,352).

As to Claims 3,14, **Mitchell** teaches a personal information terminal according to Claim 1, wherein the data display means is an ocular type data device comprising of a liquid crystal display device and an illumination device:

**Mitchell** does not teach the following limitation:

“a prism”

However, it is obvious that **Mitchell** suggests the limitation. This is because **Mitchell** teaches ocular systems (Col. 9, lines 7-9). **Zavracky** teaches ocular head mounted displays with prisms (Figures 5,31 and Col. 25, lines 13-15). Since, **Mitchell** and **Zavracky** are in analogous ocular display art, it would have been obvious to one of ordinary skill in the art to add prism capability to **Mitchell**'s invention for focusing light rays as taught by **Zavracky**'s invention in order to provide projected images to a user.

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As to Claim 9, **Mitchell** teaches a personal information terminal according to Claim 8, wherein the notification means comprises:

**Mitchell** does not teach the following limitation:

“a light emitting diode capable of emitting light of a plurality of colors”

**Zavracky** teaches ocular head mounted displays with color LEDs (Figure 21 and Col. 21, lines 28-35). Since, **Mitchell** and **Zavracky** are in analogous ocular display art, it would have been obvious to one of ordinary skill in the art to add color LED capability to **Mitchell**'s invention for color illumination as taught by **Zavracky**'s invention in order to provide projected images to a user.

As to Claim 24, **Mitchell** teaches a personal information terminal according to Claim 1, wherein the data display means is arranged within a frame of a display window provided to a housing of the personal information terminal, and:

**Mitchell** does not teach the following limitation:

“an area around the display window frame is black”

**Zavracky** teaches displays with black areas (Figure 4 and Col. 9, lines 46-50). Since, **Mitchell** and **Zavracky** are in analogous ocular display art, it would have been obvious to one of ordinary skill in the art to add black bands capability to **Mitchell**'s invention for color selection flexibility as taught by **Zavracky**'s invention in order to provide projected images to a user.

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8. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Mitchell** in view of **Horvitz et al.** (US 6,023,275).

As to Claims 17-20, **Mitchell** teaches a personal information terminal according to Claim 15,

**Mitchell** does not teach the following limitations:

“wherein the data display means is lodged within a frame of a display window provided to a housing of the personal information terminal, wherein the moving means is arranged on a side of the personal information terminal housing that the display window frame is located on, and wherein the starting means is arranged on a side opposite from the side that the display window frame is located on”

However, it is obvious that **Mitchell** suggests the limitation. This is because **Mitchell** teaches a computer display with keyboard, mouse or other input mechanisms (Col. 14, lines 24-25). **Horvitz** teaches a computer with the limitations (Figure 1). Since **Mitchell** and **Horvitz** are in analogous computer display art, it would have been obvious to one of ordinary skill in the art to add the computer capability to **Mitchell**'s invention for showing display arrangements as taught by **Horvitz**'s invention in order to provide computer displays.

#### ***Response to Arguments***

9. Applicant's arguments filed in the 10/25/04 Remarks have been fully considered but they are not persuasive because of the following:

The arguments suggest that activation of video as required in **Mitchell** is not the same as limiting the amount of electrical power to the display as claimed. However, the disclosure

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teaches that not displaying VRAM data is a reduced-energy consumption mode and, hence, limiting the amount of electrical power supplied (Page 30, lines 14-18). Therefore, Mitchell's exclusion of video is also an electrical power limiting mode.

The arguments also suggest that Mitchell does not teach notification means that is outside the display window while information is being obtained. Examiner respectfully disagrees because Mitchell teaches that the video is presented in a small window on the user screen (Col. 15, lines 57-59). This teaching shows that the video window is on top (outside) of the display screen (display window). In addition, the pop-up windows are also on top of the display screen and, therefore, outside the display screen.

The arguments also suggest that the independent claims are allowable because of their dependencies on the independent claims. Examiner respectfully disagrees for the same reasons above.

Examiner respectfully invites Applicants to contact Examiner to discuss possible amendments for overcoming the prior art of record.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Kleinschmidt et al.** (US 6,085,112) teach ocular displays with wireless communications.

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11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any response to this final action should be mailed to:

**Box AF**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications; please mark "EXPEDITED  
PROCEDURE")

**Or:**

(703) 306-0377 (for customer service assistance)

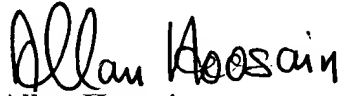
Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Allan Hoosain** whose telephone number is (703) 305-4012. The examiner can normally be reached on Monday to Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Fan Tsang**, can be reached on (703) 305-4895.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

  
**Allan Hoosain**  
**Primary Examiner**  
**3/9/05**